A CUMULATIVE INDEX

TO THE 1977 ISSUES OF

AERONAUTICAL ENGINEERING

A SPECIAL BIBLIOGRAPHY

JANUARY 1978

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
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SPECIAL NOTICE

The abstract sections of the monthly supplements of *Aeronautical Engineering* can be bound separately. Individual abstracts can be located readily by means of the page numbers given at each entry, e.g., p331 N77-23063. To assist the user in binding Supplements SP-7037 (80) through SP-7037 (91), a title page is included in the back of this Cumulative Index.
A CUMULATIVE INDEX TO

AERONAUTICAL ENGINEERING

A Special Bibliography

This Cumulative Index supersedes the indexes contained in supplements SP-7037 (80) through SP-7037 (91).
This Index is available from the National Technical Information Service (NTIS), Springfield, Virginia 22161 for $9.00 domestic, $18.00 foreign.
INTRODUCTION

WHAT THIS CUMULATIVE INDEX IS

This publication is a cumulative index to the abstracts contained in NASA SP-7037(80) through NASA SP-7037(91) of Aeronautical Engineering A Special Bibliography NASA SP-7037 and its supplements have been compiled through the cooperative efforts of the American Institute of Aeronautics and Astronautics (AIAA) and the National Aeronautics and Space Administration (NASA) Entries prepared by the two contributing organizations are identified as follows

1 NASA entries by their STAR accession numbers (N77-10000 series)
2 AIAA entries by their IAA accession numbers (A77-10000 series)

HOW THIS CUMULATIVE INDEX IS ORGANIZED

This Cumulative Index includes a subject index, a personal author index, a corporate source index, a contract number index, and a report/accession number index.

HOW TO USE THE SUBJECT INDEX

Two types of cross-references appear in the subject index

1 Use (U) references indicate that the subject term is not "postable," i.e., not a valid term, and the following term or terms are used instead. For example

AIRCRAFT PROTUBERANCES
   U PROTUBERANCES

FLIGHT PERFORMANCE
   U FLIGHT CHARACTERISTICS

2 Narrower Term (NT) references refer the user to more specific headings in the same subject area, under which additional material on the subject may be found. For example

FLOW RESISTANCE
   NT AERODYNAMIC DRAG
   NT FRICTION DRAG
   NT SUPERSONIC DRAG

In addition, a searcher may use the title or title and title extension in the index to narrow further his quest for particular items. This is because subject terms readily include more than one class of document. For example

AIRLINE OPERATIONS
   All-weather operations, including
   pilot role, instrument landing
   systems and guidance aids
   Airport congestion as constraint on
   air travel, considering runway
   capacity and adjusted demand

Illustrates a case where two references on different topics are listed under the same subject term.
HOW TO USE THE PERSONAL AUTHOR INDEX

All personal authors used in the abstract-section citations in the individual Supplements appear in the index. Differences in transliteration schemes may require multiple searching of the index for variants of an author's name. For example

EMELIANOV, M D
and
YEMELYANOV, M D

HOW TO USE THE CORPORATE SOURCE INDEX

The corporate source index entries are abridged versions of the corporate sources used in the abstract-section citations in the individual Supplements. The corporate source supplementary (organizational component) does not appear in the index. For example

BOEING CO, SEATTLE, WASH MILITARY AIRCRAFT SYSTEMS DIV
BOEING CO, SEATTLE, WASH
(Source citation entry)
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HOW TO USE THE CONTRACT NUMBER INDEX

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AF 33(615)-71-C-1758
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HOW TO USE THE REPORT/ACCESSION NUMBER INDEX

All report numbers that have been assigned by the corporate source, monitoring agency or cataloging activity appear in this index. Variations in initial cataloging may result in different report number series. For example

TP-924
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IDENTIFICATION OF DESIRED SUPPLEMENT

The abstract and descriptive cataloging for any accession number selected from the indexes may be found in the appropriate Supplement. The page-number range of each Supplement appears on the inside front cover of this index. Once the range of page numbers containing the selected accession number is located in the second column, the desired Supplement number will be found in the first column. For example

Page 331 will be found in Supplement 86

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GASOLINE New potentials for conventional aircraft when powered by hydrogen-enriched gasoline

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Lightweight, low-drag aircraft noise reduction system for flight testing general aviation aircraft

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NASA Quiet Clean General Aviation Turbofan (QCGAT) program status
A comparison of the results of dynamic wind-tunnel analysis of air accidents involving airplanes or briefs of fatal accidents involving weather as a cause/factor, US general aviation, 1975.

Briefs and accidents involving missing and missing later recovered aircraft, general aviation, 1975.

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A research program to reduce interior noise in general aviation airplanes --- test methods and results.

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Hawker Aircraft
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U SPECIFIC HEAT
HEAT CONDUCTION
0 CONDUCTIVE HEAT TRANSFER
HEAT DISSIPATION
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- Pressure driven angle of attack indication system

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- Induction of an arbitrary vortex filament in a gas
- Unsteady pressure measurements in rotor blade tips
- Induction of a gravimeter for the general case of a pendulous gyroscope
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**INDUCTION SYSTEMS**
- Induction of an arbitrary vortex filament in a gas
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Development of prediction techniques for multi-jet thermal ground flow fields and fountain formation... [AIAA PAPER 77-516]

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Effects of jets, wakes, and vortices on lifting surfaces... [NASA-TH-X-73978]

JET FLAPS

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- Performance prediction method for a wing-in-ground effect vehicle with blowing under the wing. [AD-A039629]

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- Preliminary design lift/cruise fan research and technology airplane flight control system. [NASA-CR-137971]
- Cold-air performance of a tip turbine designed to drive a lift fan. Volume 1: Baseline performance. [NASA-TR-I-3652]
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- Mathematical model for lift/cruise fan V/STOL aircraft. Simulation test data. [NASA-CR-137966]
- Lift/cruise fan V/STOL technology aircraft design definition study. Volume 3: Development program and budgetary estimates. [NASA-CR-151933]
- Follow-up studies for design definition of a lift/cruise fan technology V/STOL airplane. Volume 1. [NASA-CR-137976]
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- NASA/Navy lift/cruise fan cost reduction studies. [NASA-CR-135155]
- Analysis of control concepts for gas and shaft-coupled V/STOL aircraft lift fan systems. [NASA-TR-I-73611]
- Low speed aerodynamic characteristics of a vectored thrust V/STOL transport with two lift/cruise fans. [NASA-CR-152029]

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- Semi-buoyant lifting body hybrid characteristics for advanced naval applications. [NASA-CR-137976]
- Nonlinear lifting-surface theory for yawed and banked wings in ground proximity. [NASA-CR-137976]
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[057 A77-39426]
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[p0083 N77-13287]  
CRAIG, S. J.  
Identification of minimum acceptable  
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[AD-A029245/0]  
Identification of minimum acceptable  
characteristics for manual STOL flight path  
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CRAIB, R. S.  
Two problems that arise in the generation  
and propagation of sonic booms. 1: Flow field in  
the plane of symmetry below a delta wing. 2:  
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aeret.  
[p0486 N77-29091]  
CRAIB, R.  
Radar detection of thunderstorm hazards for air  
traffic control. Volume 1: Storm cell detection  
[AD-A03732]  
CRAIB, R. L.  
Tracking crack growth damage at control points  
[AIAA 77-379]  
A crack growth gage for assessing flaw growth  
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[AD-A031579]  
CRAWFORD, G.  
AH-1G Flight Test Manual  
[AD-A029933]  
CRAWFORD, R. N.  
Lake Erie airport study  
[ASCE PAPERS 76035]  
CRAWFORD, J. W.  
A rotating high pressure water condenser and  
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[ASME PAPER 77-WNAS-10]  
[p0514 A77-46851]  
CRAWFORD, W. J., III  
T700 engine flight test experience on OITAS and AAN  
[SCE PAPER 760934]  
[p0260 N77-28239]  
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New technology ATT in support of the YAR-64  
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[AIAA PAPER 77-696]  
[p0452 A77-41994]  
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Stability and control characteristics of the  
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[p0364 N77-24068]  
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Additional experiments with a four-bladed cyclic  
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</tr>
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<td>Donahue, E. P.</td>
<td>An approximate spin design criterion for monoplanes, 1 May 1939</td>
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<tr>
<td>Donahue, E. P.</td>
<td>Spin tests of a 1/20-scale model of the XP-39 airplane, 15 March 1939</td>
</tr>
<tr>
<td>Donahue, E. P.</td>
<td>Spin tests of a 1/20-scale model of the XP-01 airplane, 12 July 1939</td>
</tr>
<tr>
<td>Donahue, E. P.</td>
<td>Spin tests of a 1/16-scale model of the H-33 landplane and seaplane, 12 January 1940</td>
</tr>
<tr>
<td>Donahue, E. P.</td>
<td>Spin tests of a low-wing monoplane to investigate scale effect in the model test range, May 1941</td>
</tr>
<tr>
<td>Donahue, E. P.</td>
<td>Methods of analyzing wind-tunnel data for dynamic flight conditions</td>
</tr>
<tr>
<td>Donahue, E. P.</td>
<td>The effect of cowling shape on the stability characteristics of an airplane, September 1942</td>
</tr>
<tr>
<td>Donahue, E. P.</td>
<td>Some theoretical considerations of longitudinal stability in power-on flight with special reference to wind-tunnel testing, November 1942</td>
</tr>
<tr>
<td>Donahue, E. P.</td>
<td>Lateral stability and control tests of the XP-77 airplane in the NACA full-scale tunnel, 16 June 1944</td>
</tr>
<tr>
<td>Donahue, E. P.</td>
<td>The lateral flying qualities of the Bell XP-77 airplane as estimated from full-scale tunnel tests, 16 June 1944</td>
</tr>
<tr>
<td>Donahue, E. P.</td>
<td>The stability and control of tailless airplanes, 19 August 1944</td>
</tr>
<tr>
<td>Donahue, E. P.</td>
<td>Wind-tunnel tests of a 1/4 scale model of the Bell IS-1 transonic airplane</td>
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<tr>
<td>Donahue, E. P.</td>
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<td>Donahue, E. P.</td>
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</tr>
<tr>
<td>Donahue, E. P.</td>
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</tr>
<tr>
<td>Donahue, E. P.</td>
<td>Estimated transonic flying qualities of a tailless airplane based on a model investigation, 8 June 1949</td>
</tr>
</tbody>
</table>
A method for predicting the stability characteristics of an elastic airplane. Volume 1: FLEISIAB theoretical description
[1977 CH-114714] p0336 W77-23124

A method for predicting the stability characteristics of an elastic airplane. Volume 2: FLEISIAB 1.02.00 user’s manual
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Aeroelastic stability of ring arrays of blades with a random dynamic inhomogeneity
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- Lift/cruise fan V/STOL technology aircraft design
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- Lift/cruise fan V/STOL technology aircraft design
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- Lift/cruise fan V/STOL technology aircraft design
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DECCO NAVIGATOR CO. LTD., SURREY (ENGLAND). A study of sudden atmospheric disturbances and their effect on VHF position fixing accuracy [GPO-70-297] p017 77-22094

DEFENCE RESEARCH ESTABLISHMENT OTTAWA (ONTARIO). Nickel-cadmium aircraft batteries: High rate discharge equipment [AD-A031866] p039 77-22665

DEFENCE RESEARCH INFORMATION CENTRE, OXFORD (ENGLAND). Bibliography on task-oriented flight control systems [AD-A027724] p042 77-26167

DEFENSE SYSTEMS MANAGEMENT SCHOOL, FORT BELVOIR, VA. Advanced avionics for the X-10: A decision analysis model [AD-A027724] p013 77-16043
DEPARTMENT OF NATIONAL DEFENCE, OTTAWA (ONARIO).

Research and development in support of Canadian military air requirements

DEPARTMENT OF TRADE AND INDUSTRY, LONDON (ENGLAND).

The flight recorder and accident investigation

DEPABTHEHT OF TBADB AND INDOSTBY, LONDON (ENGLAND).

DEUTSCHE FORSCHUNG- UND VERSUCSARBEIT FUR LUFT- UND BAUDFAHRT, COLOGNE (WEST GERMANY).

Experimental investigation concerning the reduction of wave drag of pointed symmetrical wings of equal volume with subsonic leading edge and bell-shaped planforms for different thickness distributions in the spanwise and chordwise directions

DEUTSCHE FORSCHUNG- UND VERSUCSARBEIT FUR LUFT- UND BAUDFAHRT, GOTTINGEN (WEST GERMANY).

Development of a method for calculating separated flow around airfoils accounting for profile drag

DEUTSCHE FORSCHUNG- UND VERSUCSARBEIT FUR LUFT- UND BAUDFAHRT, OBERPFAPPENHOFEN (WEST GERMANY).

Design concepts for a fully active helicopter vibration isolation system by means of output vector feedback

EUROPEAN AEROSPACE RESEARCH AGENCY (ESTON).

Basic aerodynamic noise theory

DEUTSCHE FORSCHUNG- UND VERSUCSARBEIT FUR LUFT- UND BAUDFAHRT, BREMEN (WEST GERMANY).

Flows effect at cross flows lifting jets of V/STOL aircraft and their reaction on aerodynamic forces and moments of the nacelle

DESTABILISATION, GESTALTUNG UND VIBRATION DELAPSE OF AN ELASTIC AIRCRAFT MODEL MOVING IN THE WIND TUNNEL

The prediction of buffet onset and light buffet by means of computational methods

Statistical studies on dynamic zones of protection during horizontal evasive maneuvers

SUPERCRITICAL WING PROFILE DFLHLB-82. Results of calculations

REAL TIME DATA TRANSMISSION AND PROCESSING FOR THE DETECTION OF AIRCRAFT ANTENNA RADIATION PATTERNS

HYBRID REFERENCE SYSTEMS FOR FLIGHT TESTING

FLIGHT TESTING OF DISPLAYS IN A HELICOPTER

IMPLEMENTATION OF TASK-ORIENTED CONTROL LAW

Calculation of the dynamic response of CCV-type aircraft

HARTE CARLO SIMULATIONS OF VOR/DME HOLDING PROCEDURES. BASIC IDEAS AND APPLICATIONS

DEUTSCHE FORSCHUNG- UND VERSUCSARBEIT FUR LUFT- UND BAUDFAHRT, COLOGNE (WEST GERMANY).

Compressor development and experimental results

Comparison between the calculated and the experimental results of the compressor test cases

SAFETY OF TRANSPORT AIRCRAFT

A computer program for the design of plane and axisymmetric supersonic wind tunnel nozzles

DEUTSCHE FORSCHUNG- UND VERSUCSARBEIT FUR LUFT- UND BAUDFAHRT, GOTTINGEN (WEST GERMANY).

Improving Jet engine reliability and maintainability: A conceptual approach

A NEW LOOK IN RELIABILITY: F-18 OPERATIONAL USAGE

A view of the evolution of the reliability improvement warranty (RIW)

THE EFFECT OF RELIABILITY AND MAINTAINABILITY ON THE F-16A YJ-5011 A ENGINE

RETURNING RTD AND E ASSETS (AIRCRAFT) TO OPERATIONAL USAGE

LIFE CYCLE COST REDUCTION TECHNIQUES ASSOCIATED WITH ADVANCED MEDIA TRANSPORT (AMST)

DEPARTMENT OF DEFENCE, OTTAWA (ONTARIO).

The determination of aircraft antenna radiation patterns

THEORETICAL AND EXPERIMENTAL SIMULATION METHODS FOR EXTERNAL STORE SEPARATION TRAJECTORIES

Safety of transport aircraft

A study (safety analysis) of aircraft systems during take-off and landing

DOD AIRCRAFT GROUND FIRE SUPPRESSION AND RESCUE OFFICE, WRIGHT PATTERSON AFB, OHIO.

Design of a cascade fire apparatus for testing countermeasure effectiveness

DODIER-SSYSEM G.A.B.B., FRIEDRICHSHAFEN (WEST GERMANY).

Theoretical and experimental simulation methods for external store separation trajectorties

Safety of transport aircraft

DEPARTMENT OF NATIONAL DEFENCE, OTTAWA (ONARIO).

The evolution and control of different performance degradation processes in modern propulsion systems

DODIER-SSYSEM G.A.B.B., FRIEDRICHSHAFEN (WEST GERMANY).

Theoretical and experimental simulation methods for external store separation trajectories

Safety of transport aircraft

DOD AIRCRAFT GROUND FIRE SUPPRESSION AND RESCUE OFFICE, WRIGHT PATTERSON AFB, OHIO.

Theoretical and experimental simulation methods for external store separation trajectories

Safety of transport aircraft
Flight testing and evaluation techniques for the determination of handling qualities

DOUGLAS AIRCRAFT, INC., LONG BEACH, CALIF.
Compressible laminar boundary layers with suction on swept and tapered wings

Wing design by numerical optimization

[AIAA PAPER 77-1247] p0501 A77-44336

Trapped rubber processing for advanced composites

[SME PAPER 76-172] p0563 A77-51009

Airframe noise of the DC-9

[AIAA PAPER 77-1272] p0564 A77-51035

Effects of forward motion on jet and core noise

[AIAA PAPER 77-1330] p0567 A77-51084

Development of a graphite horizontal stabilizer

[AD-A023767] p0503 A77-11036

Advanced composite rudders for DC-10 aircraft:
Design, manufacturing, and ground tests

[AASA-CR-145068] p0066 A77-12039

Minimization of airframe response during ground operations

[AD-A026793] p0080 A77-13052

Development of technology for the fabrication of reliable laminar flow control panels on subsonic transports

[AASA-CR-145125] p0179 A77-17038

Aircraft community noise impact studies

[AD-A036186] p0175 A77-24638

Effects of laboratory simulated precipitation static electricity and swept stroke lightning on aircraft windshied subsystems

[AD-A037196] p0429 A77-26127

Wind tunnel and analytical investigation of over-the-wing propulsion/air frame interferences for a short-haul aircraft at Mach numbers from 0.6 to 0.78

[AD-A038905] p0586 A77-13314

Modeling and parameter uncertainties for aircraft flight control system design

[AASA-CR-2967] p0585 A77-33149

DOUGLAS AIRCRAFT CO., INC., SANTA MONICA, CALIF.
Structures and Materials

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A reliable dual-redundant sensor FDI system for the NASA PBC-D788 aircraft

p0267 A77-28807

Spacecraft flight control with the new phase space control law and optimal linear jet select

[AIAA 77-1071] p0455 A77-62781

DIESEL UNIV., PHILADELPHIA, PA.
Impact behaviour of polymer matrix composite materials

[AD-A038160] p0481 A77-28316

DURHAM UNIV. (ENGLAND).
Through-flow calculations in axial turbomachinery: A technical point of view

p0066 A77-12105

DYNAMICS RESEARCH CORP., WILMINGTON, MASS.
Mid-1980s digital avionics information system conceptual design configuration

[AD-A031237] p0318 A77-22103

DYTEC ENGINEERING, INC., HUNTINGTON BEACH, CALIF.
Recommended procedures for measuring aircraft noise and associated parameters

[AASA-CR-145187] p0389 A77-25912

EDINBURGH UNIV. (SCOTLAND).
Vibration of helicopters

p0327 A77-22521

ELECTROMAGNETIC COMPATIBILITY ANALYSIS CENTER, ANNAPOLIS, MD.
A model to predict mutual interference effects on an aircraft

[AD-A039224/1] p0495 A77-23917

ELLCO ENGINEERING, INC., CORONA, CALIF.
Transonic performance of Stack 2.65 auxiliary flow axisymmetric inlet

[AASA-CR-2747] p0203 A77-10056

ENGELHARD MINERALS AND CHEMICALS CORP., HOUMA, LA.
High temperature thermocouple system for advanced aircraft turbine engines

[AD-A0255007] p0037 A77-11062

ENGINEERING SCIENCES DATA UNIT, LONDON (ENGLAND).
Aerodynamic centre of wing-fuselage combinations

[AASA-760015] p0127 A77-14992

Facility checking squadron (1868TH)

ENGINEERING SCIENCES DATA UNIT, LONDON (ENGLAND).
Aerodynamic centre of wing-fuselage combinations

[p0327 A77-22521]

Effect of intake total pressure loss on net thrust at take-off: Turbojet and turbo-fan engines

[AASA-760015] p0326 A77-22502

Effect of intake total pressure loss on net thrust at take-off: Turbojet and turbo-fan engines

[AASA-760015] p0326 A77-22502

Application of automobile emission control technology to light piston aircraft engines

p0184 A77-17082

Noise standards for aircraft type certification (modifications to FAR part 36)

p0330 A77-29239

EUROPEAN SPACE AGENCY, PARIS (FRANCE).
Three-component measurements on a model of a light STOL aircraft with chordwise blowing

[ESA-TT-299] p0022 A77-10052

Theoretical and experimental investigations on landing gear spring blades out of fiber reinforced plastic for small aircraft

[ESA-TT-312] p0257 A77-10162

Experiments on the feasibility of aero-acoustic measurements in the J-2 low speed wind tunnel of the DFVLR-AVF

[ESA-TT-311] p0292 A77-10873

Display and calculation of flow past wings in supersonic flight

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Flight simulator evaluation of an electronic paravision guidance indicator

[ESA-TT-350] p0371 A77-12056

Unsteady aerodynamics of helicopter blades

[ESA-TT-327] p0077 A77-13015

Influence of runway roughness on the dynamic behaviour of aircraft at take-off

[ESA-TT-329] p0079 A77-13047

Development and application possibilities of new construction techniques with fibre-reinforced materials

[ESA-TT-327] p0083 A77-13165

Study by hydrodynamic visualisations of various processes for controlling separated flows

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Laminar separation near the trailing edge of a thin profile

[ESA-TT-383] p0016 A77-15996

Unsteady pressure measurements in rotor blade tips with incidence in incompressible flow

[ESA-TT-374] p0765 A77-24065

Influence of leading edge radius on the performance of highly deflected stator cascades

[ESA-TT-362] p0771 A77-25182

Stabilization, gust alleviation and elastic mode control for an aircraft model moving in the wind tunnel

[ESA-TT-359] p0172 A77-24148

Calculation of flow fields with separation bubbles at high Reynolds number

[ESA-TT-376] p0380 A77-25105

Advancement of a method for calculating separated flows around airfoils with special consideration of profile drag

[ESA-TT-373] p0426 A77-26091

Behavior of a subsonic flow past a thin wing in the vicinity of the leading edge

[ESA-TT-401] p0498 A77-29108

Nose Carlo simulation of VOR/DME holding procedures. Basic notions and applications

[ESA-TT-419] p0588 A77-23142

FLOX RESEARCH AND ENGINEERING CO., LINDEN, N.J.
Evaluation of methods to produce aviation turbine fuels from synthetic crude oils, phase 3, volume 2

[PB-262401/3] p0330 A77-25917

Radar special evaluation report: Degradation of
AN/DFX-6 interrogator set identification Friend or foe/Selective Identification feature IFF/IFF returns from F-4 and F-16 aircraft

TRACALS evaluation report. NAVAIDS station evaluation report, Aviano AB, Italy (16-23 August 1976)

Birchdon Dynamics Co., San Diego, Calif.

Birchdon Dynamics/Convair, San Diego, Calif.


Blackwell Propulsion Co., Denver, Colo.

Blackwell Propulsion Co., San Diego, Calif.

Birchdon Dynamics/Convair, San Diego, Calif.

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Blackwell Propulsion Co., Denver, Colo.

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Blackwell Propulsion Co., Denver, Colo.

Blackwell Propulsion Co., Denver, Colo.

Blackwell Propulsion Co., Denver, Colo.

Blackwell Propulsion Co., Denver, Colo.
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HUGHES AIRCRAFT CO., CULVER CITY, CALIF.

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HUGHES HELICOPTERS, CULVER CITY, CALIF.

Analitical investigation of an improved helicopter landing gear concept

Near-net powder metallurgy airframe structures

Function and configuration analysis program

HUGHES HELICOPTERS, CULVER CITY, CALIF.

An investigation of cockpit lighting for

compatibility with use of night-vision goggles, AV/FS/3-5

Pilotage navigation utilizing a night-vision system

Helicopter integrated control (GAT-2H)

Computer-generated displays added to HRL

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HYDROMATICS, INC., LAUREL, MD.

High speed computer studies of vortex motions in

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HAMPTON STANDARD, WINDSOR LOCKS, CONN.

Multi-sinsonic uses for prop-fan propulsion

HAWKES WINDTURBINE CORPORATION, DUNKSPOF (ENGLAND).

Flight testing techniques, autumn 1976

HAWKES SIDDELEY AVIATION LTD., LONDON (ENGLAND).

Failure mode analysis in the light of experience

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HAWKES SIDDELEY AVIATION LTD., LONDON (ENGLAND).

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HOBIN HELI, INC., BENDAPOLIS, IND.

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HAWKES WINDTURBINE CORPORATION, DUNKSPOF (ENGLAND).

Flight testing techniques, autumn 1976

HAWKES SIDDELEY AVIATION LTD., LONDON (ENGLAND).

Failure mode analysis in the light of experience

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HAWKES SIDDELEY AVIATION LTD., LONDON (ENGLAND).

Practical applications of fracture mechanics
to aircraft structural problems

HERCULES, INC., BAGGA, UTAH.

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[AD-A0302673] p0318 N77-22101
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[AD-A033506] p0324 N77-22155
Advanced integrated aircraft displays and augmented flight control
[AD-A034817] p0370 N77-24134
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[AD-A030894] p0800 N77-28187
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[AD-A0429615] p0582 N77-32417
INSTITUTE FOR AEROSPACE SYSTEMS TECHNOLOGY (N.E.A.), OTTENBORN (FERG GERMANY)
PALSCT. Description of a fighter aircraft loading standard for fatigue evaluation
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Possibilities of adapting by-pass-engines to the requirements of higher supersonic flight
[AD-A025321] p0221 N77-22123
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[AD-A025277] p0227 N77-22556
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[AD-A025292] p0232 N77-22569
INFORMATICS, INC., PALO ALTO, CALIF.
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INSTITUTE FOR AIRCRAFT SYSTEMS TECHNOLOGY (N.E.A.), STRATFORD (B BriereNG)
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[AD-A0254430] p0074 N77-12833
INSTITUTE FOR DEFENSE ANALYSES, ARLINGTON, VA.
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A review and analysis of the NASA beacon collision avoidance system
[AD-A017-747] p0366 N77-24090
INSTITUTE FOR RESEARCH ON VIDEO-NO, KOBSTEIN (GDEREID)
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INSTITUTE FOR TELECOMMUNICATION SCIENCES, BOULDER, COLO.
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Role of head-up display in instrument flight
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IOWA STATE Univ. OF SCIENCE AND TECHNOLOGY, AMES.
Multistage axial-flow turbochargers for production, transport, and interaction
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Comprehensive plan and development program for a regional airport facility, Springfield Municipal Airport for the City of Springfield, Missouri
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ITT GILFILLAN, INC., VAN NUYS, CALIF.
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JET PROPULSION LAB., CALIF. INST. OF TECH., PASADENA.
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Experimental results of large-scale structures in jet flows and their relation to jet noise production
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JOINT INST. FOR ACOUSTICS AND FLIGHT SCIENCES, HAMPTON, VA.
Determination of longitudinal aerodynamic derivatives from steady-state measurements of an aircraft
[AD-A0254430] p0458 N77-63156
JOINT INST. FOR ADVANCEMENT OF FLIGHT SCIENCES, WASHINGTON, D. C.
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KARAH SCIENCE CORP., COLORADO SPRINGS, COLO.
KARAH SCIENCE CORP., COLORADO SPRINGS, COLO.
KARAH SCIENCE CORP., COLORADO SPRINGS, COLO.
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MAC air cargo data entry: 2. Photography of
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(ONTARIO).
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NATIONAL AERONAUTICAL LAB., BANGALORE (INDIA).
Bird strike hazards: A bibliography, 1971 - 1976
[AD-A031311]
P.0099 77-17021
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION,
WASHINGTON, D. C.
LTA - Recent developments
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Summary of NASA aerodynamic and heat transfer
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[SAGE PAPEB 760917]
P.0259 77-28225
Airfoil flow conservation technology. Task
force report, September 10, 1975
[NASA-TE-14-71925]
P.0036 77-11055
Aeronautical Engineering: A special
bibliography with indexes, supplement 7a
[SAGE-SP-70-3797(74)]
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Constant lift rotor for a heavier than air craft [NASA-CASE-ABC-11045].

Aerodynamic analysis for rotorcraft in flight or in a wind tunnel [NASA-TH-I-8515].

Measurements of surface-pressure and wake-flow fluctuations in the flow field of a whitewash supercritical airfoil [NASA-TH-I-8543].

Real-time sampled simulation of advanced terminal area guidance concepts for short-haul operations [NASA-TH-I-8599].

Estimates of the effectiveness of automatic control in alleviating wake vortex induced roll excursions [NASA-TH-I-3267].

Accuracy of the Kirchoff formula in determining acoustic shielding with the use of a flat plate [NASA-TH-I-3261].

Separated-flow unsteady pressures and forces on elastically responding structures [NASA-TH-I-30906].

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Acoustically swept rotor [NASA-CASE-ABC-11106].

A failure effects simulation of a low authority flight control augmentation system on a 0-18 helicopter [NASA-TH-I-3258].

A mathematical force and moment model of a 0-18 helicopter for flight dynamics simulations [NASA-TH-I-3254].

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Multiple curved descending approaches and the air traffic control problem [NASA-TH-I-3204].

A flight investigation of the wake turbulence alleviation resulting from a flap configuration change on a B-747 aircraft [NASA-TH-I-3263].

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Propulsion system flight control integration for supersonic aircraft

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Aerodynamic characteristics of a 1/6-scale powered model of the rotor systems research aircraft

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Load and stability measurements on a soft-inplane rotor system incorporating elastomeric lead-lag dampers

Dual cycle aircraft turbine engine

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A theoretical analysis of airplane longitudinal stability and control as affected by wind shear

An investigation of a close-coupled canard as a direct side-force generator on a fighter model at Mach numbers from 0.40 to 0.90

Force testing manual for the Langley 20-inch wind tunnel with 6 tunnels

Alternate aircraft fuels: Prospects and operational implications

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An approximate spin design criterion for monoplanes, 1 May 1939

Spin tests of a 1/20-scale model of the XP-39 airplane, 15 March 1939

Spin tests of a 1/20-scale model of the XP-40-1 airplane, 12 July 1939

Spin tests of a 1/16-scale model of the XP-40-3 landplane and seaplane, 12 January 1940

Spin tests of a low-wing monoplane to investigate scale effect in the model test range, May 1941

Preliminary test results of the joint NASA diagonal-braked test vehicle evaluation of traction characteristics of grooved and ungrooved runway surfaces at Kaysi International Airport, Miami, Florida, 8-9 May 1973

The effect of cowling shape on the stability characteristics of an airplane, September 1942

Some theoretical considerations of longitudinal stability in power-on flight with special reference to wind-tunnel testing, November 1982

Lateral stability and control tests of the YP-77 airplane in the NASA full-scale tunnel, 16 June 1944

The lateral flying qualities of the Bell YP-77 airplane as estimated from full-scale tunnel tests, 16 June 1944

The stability and control of tailless airplanes, 19 August 1944

Wind-tunnel tests of a 1/4 scale model of the Bell XS-1 transonic airplane

Current status of longitudinal stability, 24 May 1948

Factors affecting static longitudinal stability and control

Low-speed wind-tunnel investigation of the longitudinal stability characteristics of a model equipped with a variable-speed wing, 23 May 1949

Estimated transonic flying qualities of a tailless airplane based on a model investigation, 8 June 1949

Some effects of sweepback and airfoil thickness on longitudinal stability and control characteristics at transonic speeds

A comparison of the aerodynamic characteristics of transonic speeds of four wing-fuselage configurations as determined from different test techniques, 4 October 1960

Characteristics of swept wings at high speeds

An assessment of the airplane drag problem at transonic and supersonic speeds, 15 July 1976

Proportioning the airplane for lateral stability

Low-speed wind tunnel investigation of an advanced supersonic cruise arrow-wing configuration

Load distribution on a closed-coupled wing canard at transonic speeds

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Evaluation of a red-silicone coated Visual Approach Slope Indicator (VASI) lens.

Naval support of high altitude area navigation routes.

Test and evaluation of an enroute system terrain-avoidance function with the NASA 1321 system.

Applications of the simulation model for air traffic control communications.

Flight test and evaluation of NEDC (McDonnell Douglas Electronics Corporation collision avoidance system).

Analysis of selected general aviation stall/spin accidents.

Logistical separation analysis of the central pacific track system.

Evaluation of radio remote control system for airport visual aids.

Air traffic control experimentation and evaluation with the NASA ATS-6 satellite. Volume 2: Demonstration of satellite-supported communications and surveillance for oceanic air traffic control.


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National Bureau of Standards, Washington, D. C.

Evaluated numerical data for the SST and chlorofluorocarbon problems: A case study of how to help the engineer and the modeller.

Visual range: Concepts, instrumental determination, and aviation applications.

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The effect of flight on the noise of subsonic jets.

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The effect of flight on the noise of subsonic jets.

National Oceanic and Atmospheric Administration, Boulder, Colo.

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National Research Council of Canada, Ottawa (Ontario).

The rotating stator concept. Experimental performance characteristics compared with the conventional compressor.

National Transportation Safety Board, Washington, D. C.


Naval Air Development Center, Warminster, Pa.

Aircraft accident reports: Brief format. Civil aviation, issue number 2, 1976 accidents.


U.S. air carrier accidents involving fire, 1965 through 1974 and factors affecting the statistics.


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Flight test evaluation of AVOID 2 (avionicobservation of intruder danger) collision avoidance system.

Research on metal matrix composites for naval aircraft engines.

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